



U.S. Department of Transportation
Federal Transit Administration



Mobility on Demand (MOD) Sandbox Demonstration: DART First and Last Mile Solution

Background

In May 2016, the Federal Transit Administration (FTA) announced an \$8 million Public Transportation Innovation funding opportunity for a Mobility on Demand (MOD) Sandbox Demonstrations. In October 2016, Dallas Area Rapid Transit (DART) was selected as one of 11 MOD Sandbox Demonstration projects. The DART First and Last Mile Solution project received \$1.5 million, most of which was used for technology, with DART providing operational funding.

Objectives

Project goals were to improve first and last mile access to DART transit for all people including individuals with disabilities, increase transit ridership on DART, improve the experience of transit, provide alternative transportation/multimodal travel options, expand service within certain areas and improve access to jobs, replace ineffective and costly fixed-route transit with MOD services, and improve customer satisfaction. The project also intended to provide same-day service for riders with disabilities who use wheelchair-accessible vehicles instead of next-day, demand-responsive service and to comply with the American with Disabilities Act (ADA) through meeting an equivalent level of service requirement.

Findings and Conclusions

DART improved transit access and decreased response and travel times for accessing the DART system by implementing MOD practices using microtransit service, called GoLink, and Transportation Network Company (TNC) service, UberPool.

DART collaborated with technology providers and conducted a MOD Sandbox Demonstration that proved to be an operational success. The project leveraged DART's GoPass app and implemented microtransit service, called GoLink, and TNC service, UberPool. Other MOD services were explored but were ultimately discontinued due to a variety of issues.

Evaluation of the project showed that MOD services improved transit access for all people and improved first mile/last mile response and travel times for accessing the DART system. GoLink and UberPool services were added without additional expense to riders. Through this project, DART improved transportation efficiency and achieved most of its goals.

Results of a MOD customer survey showed major improvements in overall customer satisfaction. MOD service extended coverage to areas with little or no transit, which increased overall transit ridership and reduced costs to DART.

Challenges included requiring a technology change in the transit environment and a strong backup support system to continue operation as well as designing tailored service to specific geographical zones that required intensive marketing campaigns. Integrating with other travel options such as carpooling and TNCs was challenging. GoPool, a carpooling component of the MOD project, had to compete with existing competitors that did not have policy limitations, which created imbalances of riders and drivers. DART experienced challenges with TNCs as well, which were overcome. These included data-sharing and service policy agreements, such as payment and technology changes.

The report includes several lessons learned in the areas of operation and technology planning and deployment as well as marketing planning and execution. Recommendations and next steps are provided.

Benefits

The results of this project are beneficial for transit agencies and municipalities planning and implementing MOD. Citizens, advocates, cities, and neighborhoods facing transit cuts will also benefit from reading the report, as will chambers of commerce, transportation management associations, and employers in lower-density areas seeking transit options for their employees. The project results will help researchers study the actual implementation of MOD.

Project Information

FTA Report No. 0164

This research project was conducted by DART. For more information, contact FTA Project Manager Steve Mortensen at (202) 493-0459 or Steven.Mortensen@dot.gov. All FTA research reports can be found at <https://www.transit.dot.gov/about/research-innovation>. All research reports can be found at <https://www.transit.dot.gov/about/research-innovation>.